

# Overview

The large district allowance (LDA) has a very distorting effect on the Western Australian electoral landscape. Brought in as a compromise measure with the introduction of one vote-one value reforms, it has come to produce some very perverse outcomes. The most extreme example is the district of North West Central, with fewer than 10,000 voters against a state average of 27.500.

Whilst the best solution lies in legislation, I suggest these distortion can be mitigated in the redistribution process. I offer the following solutions:

(1) Group sparsely populated remote areas with more densely populated areas.

That is, seek to avoid creating districts like North West Central, consisting solely of sparsely populated regions.

(2) Create some large regional electorates with a size close to, but less than, 100,000 square kilometres.

Western Australia's geography necessarily means there will be several very large electorates. But for every electorate larger than 100,000 square kilometres, there will be at least 1500 "phantom electors" created. These "phantom electors" effectively push up the quota for every electorate. The creation of large electorates with no phantom electors reduces these distortions.

By adopting these strategies, I create districts with no fewer than 18,000 voters. Additionally, I draw 44 of the 59 districts in the metropolitan region, true to the spirit of one vote-one value.

David Walsh 28 April 2019

#### Note

Though this submission contains descriptions and explanations of my approach, the linked map (see maps below) ought to be viewed alongside the text. My geographies have been built up from SA1 geographical units. In cases where my boundaries deviate trivially from existing boundaries or LGA boundaries, its usually because the SA1 geography doesn't adhere to these more useful lines. Despite this, the visual map remains the best guide as I fear the text may be at times vague or sloppy; there's bound to be an explanatory error or two slipped in.

# Detail

# Mining and Pastoral Region

The mining and pastoral region is reduced from four to three electorates with the abolition of the unsatisfactory North West Central.

## Kimberley-Pilbara (presently Kimberley)

Kimberley is below parity and must expand. It is impractical to include Port Hedland in the district, so the numbers must instead be made up by taking a large share of Pilbara's geography, including the settlements of Marble Bar and Newman. This adds around 3000 actual electors and many more phantom ones.

Given the large increase in size, I've chosen to call this Kimberley-Pilbara. Kimberley-East Pilbara would be more accurate, but that seems rather cumbersome. The name Kimberley could equally remain, given that's where most of the voters are. Alternatively, a more generic name like Northern Outback could be used.

# North West (presently Pilbara)

Though presently close to parity, the loss of territory to Kimberley requires expansion elsewhere. I've chosen to add the remainder of the Shire of Ashburton, as well as the Shires of Exmouth, Carnarvon, and Upper Gasgoyne.

# Kalgoorlie

Kalgoorile is on parity but the changes above render it disconnected from the rest of the Mining and Pastoral region. This is remedied adding the Shire of Ngaanyatjarraku at the northern end and removing the Shire of Dundas at the southern end.

# **Agricultural Region**

#### Geraldton

Geraldton is an under parity district surround by lots of remote, lightly populated outback areas. Expanding its territory to just under 100,000 square kilometres makes plenty of sense. I redraw Geraldton to cover the remainder of the City of Greater Geraldton, plus the Shires of Chapman Valley, Northampton, Shark Bay, and Murchison.

#### Moore

The loss of territory to Geraldton requires Moore to expand elsewhere. I add several shires previously covered by North West Central: Yalgoo, Cue, Mount Magnet, Sandstone, Meekatharra, and Wiluna. The Shire of Wongan-Ballidu is also added from Central Wheatbelt.

#### **Central Wheatbelt**

I've redrawn Central Wheatbelt to keep it under 100,000 square kilometres. Removing the large Shire of Kondinin, as well as the aforementioned Shire of Dalwallinu does the trick. Adding the Shires of Williams, Cuballing, Narrogin, and Wickepin restores its electoral population to parity, without going over the LDA threshold.

#### Roe

There's no avoiding the LGA effect with Roe, especially with the addition of Kondinin and Dundas shires. The transfer of territory to Central Wheatbelt necessitates additions elsewhere, hence the addition of the Shires of Plantagenet and Jerramungup.

# **South West Region**

# Mandurah

With Mandurah's enrolment very high, shedding everything east of the Serpentine River, i.e. outside the City of Mandurah, makes obvious sense. Less intuitively, I've also transferred a portion of Dudley Park - to the east of Leigh St and Leslie St - from Dawesville to Mandurah.

#### **Dawesville**

Though still above parity, the aforementioned transfer gets Dawesville within tolerance. Though the enrolment of Mandurah and Dawesville is high, it does mean that the City of Mandurah contained within two electoral districts.

# Collie-Murray (formerly Murray-Wellington)

Murray-Wellington is above parity and, with the addition of areas along the Serpentine River, must shed voters. Removing the suburban areas of Australind and Leschenault makes obvious sense,

but leaves the district's enrolment a bit thin. Hence the compensating addition of Collie and the new name of Collie-Murray.

# Bunbury East and Bunbury South (formerly Bunbury and Collie-Preston)

The rearrangement of Murray-Wellington into Collie-Murray leaves the suburbs north of Bunbury without a home. If they are added to the remnants of Collie-Preston that creates an district that encircles Bunbury. in effect an "outer Bunbury" electorate. Such an electorate would contain areas united more by their connection to Bunbury than to each other.

I suggest two Bunbury electorates would be a superior alternative. Hence, Bunbury East and Bunbury South. Similar solutions are seen in other states, e.g. Bendigo West and Bendigo East.

The two electorates split the City of Bunbury along Blair St, the railway line, and Preston River. Bunbury East also includes the Shire of Dardanup and the suburban parts of the Shire of Harvey (Leschenault, Australind). Bunbury South also includes the Shire of Capel.

The Shire of Donnybrook-Balingup, previously in Collie-Preston, is transferred to Warren-Blackwood.

#### Vaase

Vaase is slightly above parity. Redrawing the southern boundary along the Margaret River (the waterway, not the town) is an elegant solution.

#### Warren-Blackwood

The addition of the Shire of Donnybrook-Balingup is balanced by the removal of the Shire of Plantagenet.

#### Albany

Albany is near parity so needs no change. However, I've chosen to remove the Shire of Jerramungup, without which Roe looks very disconnected.

# Northern Metropolitan

#### Cottesloe

Unchanged.

## **Nedlands**

Unchanged.

### Churchlands

Within tolerance but slightly below average enrolment, Churchlands could do with a slight expansion. I've added part of Innaloo south of Beatrice St, plus the lightly populated part of Osborne Park west of Mitchell Fwy.

# Scarborough

The territory losses to Churchlands brings Scarborough's enrolment close to parity. I've adjusted the northern boundary for a more pleasing shape, losing Trigg and gaining Karinyup south of Pascoe St.

#### Carine

The territory swaps with Scarborough just described keeps Carine close to enrolment parity.

# Hillarys

Hillarys is right on parity but I've extended the northern boundary to include Beldon. This allows districts further north to retain their well defined boundaries.

#### Joondalup

Losing Beldon allows Joondalup to unite its namesake suburb within the district, extending the northern boundary to Burns Beach Rd, east of Mitchell Fwy.

#### **Burns Beach**

Brought down to parity by shedding territory east of Mitchell Fwy.

#### Butler

With an enrolment far above tolerance, Butler sheds Yanchep and Two Rocks. The northern boundary being the Eglinton locality boundary.

# Yanchep (new seat)

A new district containing areas previously in Butler, Wanneroo and West Swan. It takes in the coastal locations of Yanchep and Two Rocks plus the inland suburbs of Carramar, Tapping, Ashby, Banksia Grove, Mariginiup, and everything in between.

#### Wanneroo

A radically redrawn district extending from the suburbs of Wanneroo and Sinagra in the north to Madley and Darch in the south. The City of Wanneroo marks the eastern and western boundaries. The southern boundary is Hepburn Ave west of Mirrabooka Ave and Ocean Reef Rd east of it, whilst the northern boundary has already been described.

## Kingsley

Gains Hamersley to bring the enrolment up to parity. That part of Woodvale east of Yellagonga Park has been shifted to Wanneroo.

#### Balcatta

To compensate for the loss of Hamersely, Balcatta gains those parts of Mount Hawthorn and North Perth north of Scarborough Beach Rd and west of Charles St.

#### Perth

The territory losses to Balcatta brings Perth close to parity, but with a rather awkward shape. To give the district a more pleasing shape, I've removed that part of North Perth north of Angove St and west of Fitzgerald St, and compensated it with Mount Lawley west of Walcott St.

#### Girrawheen

The redrawing of Wanneroo south forces the amalgamation of Girrawheen and Mirrabooka. Lying between between the Mitchell Fwy and Alexander Dr, I have drawn the district to include the suburbs of Marangaroo and Girrawheen (presently in Girrawheen), plus the suburbs of Koondoola, Balga, Westminster, and part of Mirrabooka north of the Reid Hwy. Though it draws more from the

present district of Mirrabooka, I have opted for the name Girrawheen since part of the suburb of Mirrabooka lies outside the district.

# Southern Metropolitan

#### Fremantle

Fremantle's enrolment is somewhat above parity. I redraw it to shed everything south of Rockingham Rd and Phoenix Rd (using the South Fremantle suburban boundary west of Hampton Rd). These changes alone overcompensate, so I've also added suburb of East Fremantle and the remainder of the suburb of Fremantle.

# **Bicton**

Bicton is below parity and all the more so with the excision of East Fremantle. I therefore extend the district south to South St. The western boundary becomes Petra St and Carrington St (south of Marmion St). The eastern boundary remains North Lake Rd.

# Coogee (previously Cockburn)

Cockburn being presently above parity combined with the territory losses from Fremantle, allow for the drawing of a district lying in the City of Cockburn between the coast and LGA's green wedge. Named Coogee, I've drawn this district to include the suburbs of Coogee, North Coogee, Spearwood, Munster, Yangebup, Beliar, Henderson, and Wattleup.

#### Warnbro

Warnbro is above parity but within tolerance. With its fairly coherent boundaries, I suggest no major changes. I simply shed lightly populated areas north of Stakehill Rd and east of Ennis Ave. I also shift the south-eastern boundary east to the LGA frontier, the numerical consequences of which are trivial.

# Rockingham

Though Rockingham is presently close to parity, the existing boundary through Wakiki is somewhat arbitrary. I suggest uniting Wakiki within the district. To balance this change, I shed everything east of Ennis Ave (i.e. Hillman) and north of Dixon Rd and Patterson Rd (i.e. East Rockingham)

#### **Baldivis**

Baldivis is well above parity, a situation not much changed by just described territory swaps with Rockingham (trading Wakiki for Hillman). To cut the district down to size, I shed everything north of the railway line and Bertram Rd.

## Kwinana

Kwinana starts off close to parity but has been knocked about by many changes already described. Losing Henderson and Wattleup to Coogee; gaining East Rockingham from Rockingham; plus gaining the surplus of Baldivis. All these changes require the district to lose further territory, thus it sheds area north of Gibbs Rd.

#### Bateman

Being presently a bit below parity, an expansion of Bateman is logical. A very tidy solution presents itself by extending the present western and southern boundaries of North Lake Rd and South St to include part of Kardinya within the district. The present boundaries leave out part of Brentwood east of Kwinana Fwy, which may be better located in Bateman.

#### Riverton

Riverton is well below parity. An eastward expansion to include the suburb of Parkwood, plus the remainder of the suburb of Riverton, is a logical solution.

# Bibra Lake (previously Willagee)

Changes already described dictate a district lying south of South St and east of Stock Rd. This will be drawn largely from the present Willagee (though the suburb of Willagee now lies in Bicton). The numbers dictate that such a district runs east to Leeming and Jandakot Airport and south to Belair Drive, including Cockburn Central but excluding Yangebup and Treeby. This district could be called Jandakot, though I've chosen Bibra Lake to avoid confusion.

# Atwell (previously Jandakot)

The remainder of Jandakot plus surplus parts of Kwinana (Atwell) and Cockburn (Success) and Armadale (Haynes, Hilbert).

# Cannington

Under quota presently and more so with the loss of Parkwood to Riverton. Gains Wilson, the balance of Welshpool and the part of Bentley/St James east of Albany Hwy.

#### South Perth

Unchanged.

#### Victoria Park

Above parity so sheds territory to accomodate Cannington. Partly compensated with Burswood peninsula.

#### Southern River

Unites Canning Vale in district, offset by excision of its share of Gosnells and the part of Huntingdale east of Huntingdale Rd.

# Eastern Metropolitan

# Yokine (previously Mount Lawley)

Territory swaps with Perth have already been described. No other changes necessary to this near parity district. A name change becomes necessary with parts of the suburb of Mount Lawley transferred to Perth.

# Morley

Morley is under parity. This can be resolved by extending the northern boundary of Reid Hwy west to Mirrabooka Ave; gaining parts of Dianella and Mirrabooka.

#### Maylands

Unchanged.

(Note that my western boundary only deviates from the existing Tonkin Hwy boundary because the SA1 boundary does.)

### Bassendean

Essentially unchanged. I've included a small series of streets lying east of the present Lord St boundary currently in Midland. Though part of the suburb of Caversham, they're separated from the rest of the suburb by a large green wedge and would seem to be better fit with Bassendean.

# Ballajura (replaces West Swan)

West Swan is presently an unsatisfactory district spread across different suburban areas.

I've replaced it with a new district formed in large part from West Swan, plus areas presently in Girrawheen and Mirrabooka. It covers the suburbs of Landsdale (east of Mirrabooka Ave), Alexander Heights, Cullacarbardee, Ballajura, and Malaga.

#### Midland

The removal of West Swan forces Midland to be redrawn northward to Gnagarra Rd. To compensate, the district sheds everything between of Toodyay Rd and east of the railway line. It also loses Helena Valley and Boya in the south-eastern corner of the district.

# Ellenbrook (replaces Swan Hills)

Swan Hills is way above parity. My solution is to consolidate the district on Ellenbrook and Bullsbrook, shedding everything east of Brigadoon.

# Mundaring (new seat)

New seat formed by the remainder of Swan Hills, the eastern parts of the present Midland and the northern parts of Kalamunda. Includes Jane Brook, Stratton, Swan View and all the communities along the Great Eastern Hwy from Glen Forest eastward.

#### Belmont

Loses Burswood peninsula and Welshpool as already described. Otherwise unchanged.

# Thornlie

Gains part of Huntingdale and the remainder of Gosnells as described. Sheds Maddington and Kenwick to use the Canning River as the eastern boundary.

# Armadale

Slightly above parity, sheds Haynes and Hilbert.

#### **Darling Range**

The present district is well above parity. Removing the City of Kalamunda portion cuts it down to size.

#### Forrestfield

Gaining the balance of Kenwick and Maddington from Thornlie forces the excision of High Wycombe and Maida Vale. Getting the balance right then requires the addition of Lesmurdie, south of Falls Rd and Lesmurdie Rd, and generally using Carmel Rd as the boundary thereafter.

# Kalamunda

Changed substantially by alterations already described. The new district includes the bulk of the City of Kalamunda - the remainder being in Forrestfield - plus Darlington, Boya and Helena Valley.

# **Numerical Summary**

District	Actual	Area	Phantom	Total
Albany	26,600	4,319	0	26,600
Armadale	27,241	34	0	27,241
Atwell	27,033	84	0	27,033
Balcatta	27,678	19	0	27,678
Baldivis	27,188	127	0	27,188
Ballajura	26,482	41	0	26,482
Bassendean	27,550	23	0	27,550
Bateman	29,855	21	0	29,855
Belmont	27,182	63	0	27,182
Bibra Lake	27,259	53	0	27,259
Bicton	26,287	19	0	26,287
Bunbury East	28,456	641	0	28,456
Bunbury South	27,749	631	0	27,749
Burns Beach	26,568	26	0	26,568
Butler	26,511	50	0	26,511
Cannington	26,023	37	0	26,023
Carine	26,936	22	0	26,936
Central Wheatbelt	29,301	97,819	0	29,301
Churchlands	29,320	30	0	29,320
Collie-Murray	27,221	5,898	0	27,221
Coogee	28,083	61	0	28,083
Cottesloe	27,649	30	0	27,649
Darling Range	29,172	1,377	0	29,172
Dawesville	29,972	128	0	29,972
Ellenbrook	28,093	522	0	28,093
Forrestfield	29,380	146	0	29,380
Fremantle	28,273	39	0	28,273
Geraldton Girrawheen	29,891	96,059	0	29,891
	29,881	24	0	29,881
Hillarys Joondalup	30,501	26	0	30,501
Kalamunda	28,487	32 542	0	28,487
Kalgoorlie	28,182 19,986	623,988	9,360	28,182 29,346
Kimberley-Pilbara	18,162	795,637	11,935	30,097
Kingsley	29,311	26	0	29,311
Kwinana	27,440	134	0	27,440
Mandurah	29,819	47	0	29,819
Maylands	27,875	21	0	27,875
Midland	27,038	134	0	27,038
Moore	22,751	426,770	6,402	29,153
Morley	28,506	20	, 0	28,506
Mundaring	28,154	671	0	28,154
Nedlands	27,443	22	0	27,443
North West	26,587	246,483	3,697	30,284
Perth	27,543	21	0	27,543
Riverton	29,334	23	0	29,334
Rockingham	28,929	39	0	28,929
Roe	25,760	212,228	3,183	28,943
Scarborough	27,361	16	0	27,361
South Perth	28,582	20	0	28,582
Southern River	28,251	45	0	28,251
Thornlie	29,405	25	0	29,405
Vaase	29,049	1,800	0	29,049
Victoria Park	25,386	20	0	25,386
Wanneroo	26,326	75	0	26,326
Warnbro	28,832	96	0	28,832
Warren-Blackwood	28,692	19,465	0	28,692
Yanchep	26,366	524	0	26,366
Yokine	27,901	18	0	27,901
Grand Total	1,626,793	2,537,312	34,577	1,661,370

# Maps

The subsequent maps have been published at <a href="https://walsh.carto.com/builder/eaa2f625-7587-49cb-bdf1-30a08343477f">https://walsh.carto.com/builder/eaa2f625-7587-49cb-bdf1-30a08343477f</a>





















